



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/747,928	12/29/2003	Ramamurthy Krithivas	P17722	7078
46915 7590 06/07/2007 KONRAD RAYNES & VICTOR, LLP. ATTN: INT77 315 SOUTH BEVERLY DRIVE, SUITE 210 BEVERLY HILLS, CA 90212			EXAMINER PEYTON, TAMMARA R	
			ART UNIT 2182	PAPER NUMBER
			MAIL DATE 06/07/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/747,928

Applicant(s)

KRITHIVAS, RAMAMURTHY

Examiner

Tammara R. Peyton

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12/29/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) 1-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 10/13/06, 7/25/06.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang (WO-03/017598) and Sarkar et al., "Storage over IP: When Does Hardware Support help", both art cited as prior art.

As per claim 21-24 and 31-36 Yang teaches a at least one memory (48, Fig.2 ) which includes an operating system; processor (46, Fig. 2) coupled to the memory; a bus; a target controller (Fig. 2) coupled to the bus; data storage (Fig. 54, Fig. 2) adapted to store target data; a data storage controller (40, Fig. 2) for managing Input/Output (I/O) access to the data storage; a device driver executable by the processor in the memory; and a network controller (42, Fig. 2) coupled to the bus and having an offload engine and a cache adapted to store target data from at least one target address of said target data storage (pg. 7, lines 19-pg. 9, lines 1-3), said network controller being adapted to: receive from the initiator (100), a packet containing a read command which addresses target data having a target address within said target storage; and compare the target address of the read command to a target address of the target data, in the cache for the network controller engine; wherein said offload engine is adapted to process said

Art Unit: 2182

read command if target data stored in the cache was obtained from a target address which corresponds to the read command target address, said processing including sending target data stored in the cache through the network to the initiator. (pg.10, lines 9 – col. 11, lines 1, 2, Figs. 1-4) However, Yang is silent in respect to using a protocol engine with the network adapter; nonetheless, Sarkar teaches the use of a TCP/IP offload engine using iSCSI protocol. It would have been obvious to one of ordinary skill at the time the invention was made that to implement Sarkar's TCP/IP offload engine with iSCSI protocol with Yang because doing so would improve the acceleration of Yang's protocol processing.

As per claim 24-31 and 36-42, Yang-Sarkar teaches wherein said packet includes an Ethernet packet, and Internet Protocol and Transmission Control Protocol package layers encapsulated in the Ethernet packet, and wherein the Internet Small Computer System Interface package is encapsulated in the Internet Protocol and Transmission Control Protocol package layers. Furthermore, Yang-Sarkar teach wherein the network controller (Figs. 1 and 2) is further adapted to forward the read command over the bus to the target controller (pg. 7, lines 19-pg. 9, lines 1-3), for processing by the target controller if the target data stored in the cache was obtained from a target address which does not correspond to the read command target address and wherein the target controller is adapted to process the read command in accordance with an Internet Small Computer System Interface layer.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammara Peyton whose telephone number is (571) 272-4157. The examiner can normally be reached between 6:30 - 4:00 from Monday to Thursday, (I am off every first Friday), and 6:30-3:00 every second Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on (571) 272-4083. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Any inquiry of a general nature of relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-2100.

Mailed responses to this action should be sent to:

Commissioner of Patents and Trademarks  
Washington, D.C. 20231.

Faxes for Official/formal (After Final) communications or for informal or draft communications (please label "PROPOSED" or "DRAFT") sent to:

(571) 273-8300

Hand-delivered responses should be brought to:

USTPO, Randolph Building, Customer Service Window  
401 Dulany Street  
Alexandria, VA 22314.

**TAMMARA PEYTON**  
**PRIMARY EXAMINER**



Tammara Peyton

May 30, 2007